BIOLOGY COMMITTEE MEETING SUMMARY

July 24, 2002 Denver, Colorado

Biology Committee: Frank Pfeifer, Tom Nesler, John Hawkins, Tom Pitts, John Wullschlaeger, Tom Chart, Mark Wieringa, Kevin Christopherson, and Bill Davis. (Wyoming absent.)

Other participants: Mike Hudson, Bob Muth, George Smith, Angela Kantola, Chuck McAda, Ray Tenney, Tim Modde, Rich Valdez, and Dave Soker,

Assignments are indicated by ">" and at the end of the document.

- 1. Revisions / additions to the agenda The agenda was modified as it appears below.
- 2. Nonnative fish control workshop Comment deadline extended to August 9. Presenters should check accuracy of the summary of their presentation; workshop participants should review discussion/conclusions. The Program Director's office will finalize the summary and hopefully hand it out in final at the August meeting.
- 3. Review summaries and action items from Review summary of June 12-13 meeting and June 18 conference call The summaries summary were approved as written.
- 4. Late reports Tim Modde will send the BC the peer review comments on the Yampa humpback chub population estimate report. The Committee reviewed and made necessary revisions to the late reports list. >Angela Kantola will post the revised list to the listserver.
- 5. USFWS proposed revision to Gunnison River Flow Recommendations - Frank Pfeifer assured the Committee they will have opportunity to review the full final report. The Service hopes the Committee will come to agreement on the numbers today so they can finalize the report and give Reclamation the go-ahead to begin modeling. Chuck McAda outlined his revised recommendations (posted to the listserver on July 22). John Wullschlaeger said he's inherently uncomfortable with "greater than or equal to" flow targets because the number becomes the target (as opposed to any flows exceeding the minimum recommendation). Tom Nesler asked why we're calling for so much water on the "shoulders" of the peak as opposed to the peak itself. Chuck said those recommendations came directly from Pitlick's recommendations. Chuck discussed the biological/geomorphological bases for the revised recommendations. Tom Pitts said he doesn't see justification for the revised 18,000 cfs peak flow. Tom Nesler pointed out that Chuck's recommendations show that 18,000 cfs mobilizes more of the bed (76% of the habitat). Tom Chart said he believes the peak flow in wet and moderately wet years are very important for channel maintenance in critical reaches of the river (thus we should try to reach 16,000 cfs for at least two days in moderately wet years). Frank emphasized that Pitlick says the channel could not have been maintained over the last 30 years if the peak had not exceeded 14,350 cfs. John Hawkins expressed concern over basing the target flows entirely on geomorphological data, and noted that flows in average years are

very important because those are the ones we can affect. Bob Muth stressed that the biological links are the same for the revised flow recommendations as for the previous ones. John Wullschlaeger disagreed, noting, for example, that the new recommendations maintain 50% of the channel versus 76%. Tom Chart said he does not want to see 14,350 cfs become the peak flow target (we may hope we'll get more than that, but it needs to be in writing). Bob Muth noted that the required duration of peak flows is an uncertainty. Mark Wieringa said he thought we previously agreed that these flow recommendations were minimums not caps. John Wullschlaeger noted that the targets on the Green River below Flaming Gorge have come to be viewed as caps. Several Committee members asked who would make the decision to exceed the 14,350 cfs if there was a way to store the water? Chuck said the real question seems to be how we can consider/incorporate/apply the variation between 14,350 cfs and 24,000 cfs that Pitlick's data addressed. Bill Davis suggested adding operational trigger points based on inflow and reservoir levels. Chuck responded that's the second step in the process (but not part of the flow recommendations). Tom Pitts said we seem to want to quantify some variation around the median bank-full flow. Bob Muth said flow recommendation numbers can't be made that do that. Chuck clarified that some sort of clarification (perhaps in text) needs to be made so that the 14,350 is clearly understood to be a minimum. John Hawkins asked if the 18,000 cfs and 16,000 cfs can be defended based on biological factors such as floodplain habitat created. Tom Pitts said he believes we need to determine how to address the needed variability, perhaps by looking at historic frequencies. Tom said the water users want to see the flow recommendations finalized so we can move forward with modeling and so forth. John Wullschlaeger said he thinks what they're looking for is some basis for exceeding 14,350 cfs some of the time. Tom Nesler noted that he will post a memo about the flow recommendations from CWCB to the listserver (which argues that the water won't be available to meet the some of these flow recommendations, anyway, because they're based on a wetter-than-normal study period). >Chuck McAda will conference call with Tom Pitts, Tom Chart, Tom Nesler, John W. (and John Hawkins, if available) to discuss revised recommendations that address the needed variability on August 14 at 2 p.m.. > Angela Kantola will set up the call. >Prior to the call, Chuck will provide an analysis of how often and by how much the minimum flow recommendations have been exceeded over the 30-year period. The resolution developed by this sub-group will come back to the Biology Committee for consideration by August 27.

6. Status of studies at the Stirrup floodplain - Kevin Christopherson said the fish are growing well and they think they can complete the experiment next week. We will have to decide what to do with the fish at that point (Kevin recommends stocking them in the river). Tim Modde showed photos of Stirrup and the 3-4" bonytail they captured outside the pens. The bonytail in Stirrup are F3's (Mohave) and the razorbacks are excess fish (F2's) from the regular paired matings. Frank proposes releasing the fish to the Stirrup now, pumping in the necessary water to over-winter them there, then letting them get back in the river if it connects with the Stirrup next spring, or trapping them and pittagging them and releasing them next fall if it doesn't connect in the spring. Frank agreed that we could try trapping before spring runoff and pit-tag as many fish as are large enough and release them at that time. The Committee considered the importance of pit-

tagging all the fish (which allows us to know they're stocked fish and from what stocking) versus just letting some of them return to the river (saves time, money, and stress on the fish). Frank said he would prefer to get them to the recommended stocking size before stocking them or allowing them to escape to the river. After the fish are counted next week, they will be released to the Stirrup and a decision will be made later regarding tagging and release. Tim said this success suggests we need to decide where to go from here (e.g., continue the multi-year study, etc.). >Tim Modde and Kevin Christopherson will provide a summary of the experiment by the August Biology Committee meeting (to aid discussion of the FY 2003 scope of work). Kevin said that the fact that some of the fish escaped the enclosures will result in a somewhat lower estimate of survival.

- 7. Floodplain Synthesis Report - Bob Muth said the Program Director's office intends to have a revised draft out by the August Biology Committee meeting, which will include recommendations for how we will proceed in the future (with considerable specificity). Dave Soker provided updated floodplain easement and growout pond reports, along with a copy of the brochure we provide to landowners. Dave recommended the Burdick/Irving study as a good summary reference of available floodplains and provided copies to those who wanted one. Dave said that it's very difficult to accurately determine acres actually available for easements, however. Dave described progress on acquiring easements at Thunder Ranch and in Mesa County. Rich Valdez gave an update on the floodplain model, noting he's addressed the issues previously raised by the Biology Committee and gotten additional information a transport model (which is now different than the earlier one Rich presented). Rich is working to get more specific particle transport data from Steve Platania. >Rich will get a revised draft of the model out in advance of the August Biology Committee meeting (anyone wanting a preliminary draft that doesn't yet incorporate the new particle transport information can contact Rich, ravaldez@aol.com). The model has four sub-routines. Rich said any additional data on floodplain survival rates would be a big help to him. The purpose of the model is to estimate the amount of floodplain habitat needed to achieve the demographic recovery goals for adult razorback sucker. The model does assume that small fish are reaching the floodplain. >Bob Muth will check with Brent Uilenberg on the floodplain program cost estimate. Dave noted that the better we can define "floodplain" (i.e., habitat that's really best for the fish), the more effective our land acquisition will be.
- 8. Potential release of additional flow at Flaming Gorge Dam in August to facilitate collection of data (3rd pass pop. est.) in Desolation Canyon Mike Hudson said the flows were too low to do the third pass of this work, and so a proposal was made to consider a special release from Flaming Gorge to get the third data point. This would set a negative precedent of deviating from the flow recommendations, and the effects of doubling the current flow on young-of-year pikeminnow are unknown. Tom Chart said it would be an increase of ~1000 cfs for ~5 days for a total of about 10,000 af (which might affect our ability to meet flow recommendations next year). This also could affect the work in Lodore Canyon. Bob Muth said he's concerned about doing these estimates in midsummer, given the broad range of flows, stress to the fish, etc. Bob said the pikeminnow mortality rate (10%) in the first two passes seems too high. Tom Pitts seconded this

concern. Mike Hudson said we might still have a valid population estimate without the third pass. Last year's data (all chubs captured) with 2 passes are comparable to 3 passes. The concern with fall sampling is that the catch rate may be lower. The Committee considered a third pass in the fall (would still require a release, but there would be lower temperatures and fewer pikeminnow affected), but this would violate assumptions in the model (too much time since elapsed since the previous sampling). Bob Muth recommended seriously considering doing all the sampling in the fall next year. The Committee agreed to forego the third pass this year and to move the sampling to the fall next year to reduce mortality. >Mike will analyze this year's and last year's data, comparing 2 passes to 3.

- 9. Review for final approval: *SWCA*, *Inc. 2002*. *Non-native fish control in backwater habitats in the Colorado River* The Committee accepted the report and the recommendations as written.
- 10. Review for final approval the much anticipated: *Nesler, T.P. 2002. Interactions between endangered fishes and introduced game fishes in the Colorado River, Colorado, 1986-1991* The Committee thoroughly enjoyed teasing Tom Nesler about his long overdue report. Minor modifications were made to the recommendations section. Tom will make sure the previously-approved nonnative fish control report is correctly cited. The Committee accepted the report and the recommendations with these minor modifications.
- 11. Yampa River PBO update and a discussion of the benefits of using the Steamboat Lake lease water during this drought year. An update on the Yampa Management Plan and PBO was posted to the Biology Committee vesterday. Tom Pitts expressed concern about the continually slipping date. George Smith explained that he's been working on getting a long-term lease for water from Steamboat Lake for over a year, but that won't be completed this year. Therefore, we've discussed another one-year lease (the 2,000 af for the fish would only be available if Excel Energy doesn't call for their 5,000 af). Because the flows are already so low, because the leased water probably won't even reach the critical reach (there's never been administration and transit losses would be nearly 100%), and because Parks wants \$64,000 for the 2,000 af this year, George doesn't believe it would help the fish much to lease the water this year. The Committee agreed that it would be futile to lease the water this year. In light of this information, some Committee members questioned whether enlarging Elkhead will help the fish if releases can't be protected. Ray Tenney acknowledged that this has identified a shortcoming of the recommendations in the Yampa PBO, which will need to be addressed (it's on the list of things to be addressed under NEPA). Tom Pitts said he's confident we will not enlarge Elkhead unless we can assure that the water can be used for its intended purpose. In further discussion of the long-term lease from Steamboat, George expressed concern about the additional restrictions that Parks wants to put on the lease. He therefore wonders if it might not be more valuable to add a little more storage at Elkhead and forget about the Steamboat lease. Tom Pitts recommended that this option be built into the planning process right away.

- 12. Expansion of the August Biology Committee Meeting (Salt Lake City, UDWR) The meeting will be August 27-28 (8a.m.-4p.m. on the 27th and 8a.m.-11:30a.m. on the 28th), followed by the monitoring stocked fish workshop August 28-29 (1p.m. 5:30p.m. on the 28th and 8a.m. 3:30p.m. on the 29th). Agenda items for the Biology Committee meeting will include:
 - FY 2003 new starts and revised scopes of work
 - River flows status
 - Report review and approval (revised conclusions to Osmundson's pikeminnow report [22A2)], and possibly humpback chub population estimate in the Yampa River [Modde, 22A4], razorback sucker monitoring program [Bestgen, 22D], and Green River nonnative fish control [Andersen, 59])
 - Gunnison River flow recommendations
 - Discussion of the razorback floodplain model.

A revised draft floodplain synthesis report will be out by the meeting, but not in time for review and discussion. >Angela Kantola will contact Jason Thron will to arrange for the meeting room from the 27th to the 29th. The Committee discussed the monitoring stocked fish workshop agenda. Bob Muth asked Committee members to submit any recommended changes to the agenda to him. Frank Pfeifer encouraged shortening the presentations and providing more time for discussion. Bob Muth agreed and will extend the agenda on the first day and move the presentations to then. Tom Pitts noted that reassessment of facilities needs could be addressed at a later time (e.g., ask Tom Czapla and Jim Brooks to review facility needs after the workshop and get back to the Committee with any needed recommendations). The draft monitoring plan previously developed by Hudson, Modde, and Bestgen (and put on hold by the Biology Committee) will start off the meeting on the second day.

ASSIGNMENTS

Angela Kantola will post the revised reports due list to the listserver.

Chuck McAda will conference call with Tom Pitts, Tom Chart, Tom Nesler, John W. (and John Hawkins, if available) to discuss revised recommendations that address the needed variability on August 14 at 2 p.m.. Angela Kantola will set up the call. (*Done.*) Prior to the call, Chuck will provide an analysis of how often and by how much the minimum flow recommendations have been exceeded over the 30-year period.

Tim Modde and Kevin Christopherson will provide a summary of the experiment by the August Biology Committee meeting.

Rich will get a revised draft of the floodplain model out in advance of the August Biology Committee meeting (anyone wanting a preliminary draft that doesn't yet incorporate the new particle transport information can contact Rich).

Bob Muth will check with Brent Uilenberg on the floodplain program cost estimate.

Mike will analyze this year's and last year's Desolation humpback chub data, comparing 2 passes to 3.

Angela Kantola will contact Jason Thron will to arrange for the meeting room from the 27^{th} to the 29^{th} . (Done.)